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PRE-APPEAL BRIEF REQUEST FOR REVIEW

Docket Number (Optional)

NIHE - 39088

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Application Number

10/560,846

Filed

Dec. 15, 2005

First Named Inventor

Kiyoshi Fujii

Art Unit

3768

Examiner

Helene Bor

Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.

This request is being filed with a notice of appeal.

The review is requested for the reason(s) stated on the attached sheet(s).

Note: No more than five (5) pages may be provided.

I am the

applicant/inventor.



Signature

Brad C. Spencer

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Telephone number

attorney or agent acting under 37 CFR 1.34.

February 19, 2008

Registration number if acting under 37 CFR 1.34 _____

Date

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required.
Submit multiple forms if more than one signature is required, see below*.

*Total of 3 forms are submitted.

This collection of information is required by 35 U.S.C. 132. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11, 1.14 and 41.6. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant	:	Fujii, Kiyoshi	Appln. No.	:	10/560,846
Filed	:	December 15, 2005	Docket No.	:	NIHE-39088
Title	:	ULTRASONOGRAPH	Customer No.	:	52054
Conf. No.	:	2071	Art Unit	:	3768
Examiner	:	Helene Bor			

Mail Stop AF
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

PRE-APPEAL BRIEF REQUEST FOR REVIEW

Applicants request a pre-appeal brief conference for review of the final rejection in the above-identified application. The final rejection is set forth in the Office action of October 19, 2007. The three-month period for responding to the Office action expired on January 19, 2008. A Petition for Extension of Time and the Notice of Appeal are enclosed.

REMARKS/ARGUMENTS

The following remarks and arguments are provided in support of this pre-appeal brief request for review, and supplements the arguments and evidence provided in Amendment A (submitted August 1, 2007) and Response B (submitted December 26, 2007).

Claims 1 and 2 are directed to an ultrasonic diagnostic apparatus that includes a window, which is in contact with a test subject (e.g., a patient). Ultrasonic waves reflect from an inner surface of the window and the reflex times of the waves are used to calculate sound velocity. The window is identified by reference character 5 in Fig. 1A and 1B and is discussed throughout the specification, for example at application page 6, lines 17-21 and page 7, lines 14-23.

Claims 1 and 2 were rejected under 35 U.S.C. 112, second paragraph, for reciting the term "window." The requirement to distinctly claim means that the claim must have a meaning discernible to one of ordinary skill in the art. Only when a claim remains *insolubly ambiguous*

without a discernible meaning after all reasonable attempts at construction should a claim be declared indefinite. See MPEP § 2173.02 citing *Metabolite Labs., Inc. v. Lab. Corp. of Am. Holdings*, 370 F.3d 1354, 1366, 71 USPQ2d 1081, 1089 (Fed. Cir. 2004).

The structural and functional relationship of the window 5 to the ultrasonic diagnostic apparatus is clearly shown in the figures and described in the specification. As used in the specification and claims, the term “window” has a clear meaning that is readily discernable to one of ordinary skill in art. Moreover, the term “window” already had a clear meaning in the pertinent art when the subject application was filed. See, e.g., Greenstein (US 5,052,393), Enjoji (US 4,807,634), and Adams (US 4,762,002). The term “window” is recited over 60 times in the Ramamurthy reference cited by the Examiner and can be found in its claims. The terms “window” and “lens” appear together in various sentences in Ramamurthy in the alternative (i.e., “lens or window”). Contrary to the Examiner’s assertion in the Office action at page 2, Ramamurthy’s “lens” does not further define “window,” it is an alternative to a window.

The Examiner asserts that the term “window” can have different meanings (citing Slayton, US 6,623,430, which discusses a windowed region of a waveform) and, therefore, is indiscernible to one of ordinary skill in the art without further definition. The proper analysis is not whether a term can have different meanings. Many, if not most, English words must be read in context to discern their intended meaning. The proper analysis as set forth in the MPEP is whether a claim remains insolubly ambiguous without a discernible meaning after all reasonable attempts at construction. Claims 1 and 2 recite the term “window,” which is well-known in the art and shown and described in the application. Therefore, the term “window” is discernable by one of ordinary skill in the art and properly apprises one of ordinary skill in the art of the scope of the claimed subject matter. Claims 1 and 2 clearly serve the notice function required by 35

U.S.C. 112, second paragraph. For the reasons discussed above, applicant respectfully submits that the Examiner's rejections under 35 U.S.C. 112, second paragraph are improper and should be withdrawn.

Claims 1-4 were rejected under 35 U.S.C. 102(e) as being anticipated by Ramamurthy.

Claim 1 recites in part, "calculating the sound velocity of ultrasonic waves based on the difference between the reflex time of ultrasonic wave reflected from the inner surface of a window in contact with a test subject and the reflex time of ultrasonic wave reflected from the outer surface of the window..." Claim 1 requires a difference between two wave reflex times, one from a wave reflected from the inner surface of a window and one from a wave reflected from the outer surface of the window. Ramamurthy does not teach the noted limitations of claim

1. Ramamurthy merely teaches a time delay after a transmit event and using time-of-arrival to estimate window temperature (10:17-19, 32-34). Ramamurthy is silent with respect to calculating a sound velocity based on a difference between a reflex time of ultrasonic wave reflected from an inner surface of a window and a reflex time of ultrasonic wave reflected from an outer surface of a window. The Examiner asserts that Ramamurthy "teaches calculating the temperature based on the thickness of the window/lens (t_1) and the propagation velocity (v_1)," from which "a temperature of the window is calculated." However, none of the teachings cited by the Examiner disclose calculating a sound velocity based on a difference between a reflex time of ultrasonic wave reflected from an inner surface of a window and a reflex time of ultrasonic wave reflected from an outer surface of a window. Applicant submits that Ramamurthy does not anticipate claim 1, and respectfully requests that the rejection be withdrawn. Claim 3 depends from claim 1 and, therefore, is not anticipated by Ramamurthy.

Claim 2 recites, “calculating the sound velocity of ultrasonic waves based on the reflex time of ultrasonic wave passing through fluid wherein sonic elements vibrate and reflected from the inner surface of a window in contact with a test subject and the thickness of the fluid.” Ramamurthy does not teach or suggest calculating a sound velocity *based on a thickness of a fluid* wherein (i.e., in which) sonic elements vibrate. Ramamurthy teaches that “some transducer lens or window materials acoustically match well to water, gel or tissue” and that “vary [sic] little reflected signal is provided from the lens or window surface for such materials” (11:63-66). Ramamurthy also teaches that “a lower frequency excitation signal...is used to provide a larger reflection from the lens or window surface” (12:1-3). Additionally, Ramamurthy teaches, “variations in the lens or window surface reflection coefficient, such as caused by air versus gel or tissue contacting the lens or window, are removed or accounted for by using a curve fitting approach” (12:66-13:2). Applicant submits that the water or gel discussed in Ramamurthy does not teach or suggest “fluid wherein sonic elements vibrate,” as required by claim 1. Further, Ramamurthy does not teach or suggest calculating a sound velocity based on a thickness of such a fluid. Applicant submits that Ramamurthy does not anticipate claim 2, and respectfully requests that the rejection be withdrawn. Claim 4 depends from claim 2 and, therefore, is not anticipated by Ramamurthy.

Claim 1 was rejected under 35 U.S.C. 102(b) as being anticipated by Umemura. The Office action discusses what Umemura teaches without explaining how Umemura teaches all of the claimed limitations. Applicant’s attorney has thoroughly reviewed Umemura and respectfully submits that Umemura does not anticipate claim 1. For example, Umemura does not teach a difference between a reflex time of ultrasonic wave reflected from the inner surface of a window in contact with a test subject and the reflex time of ultrasonic wave reflected from the

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outer surface of the window. Therefore, Umemura does not anticipate claim 1 and the rejection of claim 1 should be withdrawn.

The Examiner considered the applicant's declaration under 37 CFR 1.131 (hereinafter "131 Declaration"), submitted August 1, 2007, to be ineffective to overcome the Ramamurthy reference. As discussed in applicant's Response B at page 3 and in the 131 Declaration at paragraph 5, a draft application was transmitted to the assignee on June 20, 2003, reviewed by the applicant and assignee, amended, and filed on July 4, 2003. The draft application was reviewed, amended and filed during a mere two week period between June 20, 2003 and July 4, 2003. The acts of reviewing, amending and filing during the two week period themselves prove diligence in constructively reducing the invention to practice beginning prior to June 23, 2003. Indeed, applicant invented the claimed subject matter prior to the effective date of Ramamurthy.

In light of the foregoing, it is respectfully submitted that the present application is in condition for allowance and notice to that effect is hereby requested. If it is determined that the application is not in condition for allowance, applicant requests notification setting a date for filing an appeal brief.

If there are any additional fees resulting from this communication, please charge same to our Deposit Account No. 16-0820, our Order No. NIHE-39088.

Respectfully submitted,

PEARNE & GORDON, LLP

By: Brad C. Spencer

Brad C. Spencer, Reg. No. 57076 - February 19, 2007

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